

Abstract of the Disclosure:

5       An adder circuit (41) adds four main electric signals to produce an HF  
signal (a picked-up signal). A peak hold circuit (43) holds a peak of the HF  
signal to a peak held signal. The peak held signal is a signal indicative of a  
level of I-TOP of the HF signal. A gain control amplifier (44) amplifies the HF  
signal by a gain equal to a reciprocal of the peak held signal to produce an  
amplified signal.